

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~Atomic Energy Act 1954~~

ANNEX B

SIOP-62 AN APPRECIATION

The Single Integrated Operational Plan is the war plan which directs the bulk of U.S. and Allied atomic strike forces in the event of general war with the Sino-Soviet Bloc. The origins of SIOP-62 lie in Study #2009 of the Net Evaluation Subcommittee. The study developed a single list of targets, known as the "optimum mix," and indicated what levels of damage could be accomplished against the target system with varying levels of assurance and capabilities. President Eisenhower approved of the target list and selected the damage and assurance criteria to be used in operational planning.

On 19 August 1960, the JCS issued the National Strategic Targeting and Attack Policy (NSTAP) as guidance for the planning staffs of the unified and specified commanders. Since NESC #2009 had considered the initial attack only, the NSTAP and SIOP-62 are similarly concerned and do not provide for follow-on attacks. The NSTAP laid down two objectives for the planners: (1) to destroy or neutralize the Sino-Soviet Bloc strategic nuclear capability and primary military and government controls of major importance; (2) to attack the major urban-industrial centers of the Sino-Soviet Bloc in order to achieve the general level of destruction selected by the President from NESC #2009.

With this guidance, the Director of Strategic Target Planning (DSTP), assisted by a joint staff in Omaha, established a National Strategic Target List (NSTL), determined the priorities to be given to these targets, and drew up a plan for a coordinated attack on the target system by major U.S. and Allied atomic strike forces. SIOP-62 resulted from this effort and became effective 1 April 1961. Unless changed, it will remain in effect until 1 July 1962 when SIOP-63 is scheduled to supersede it.

SIOP-62 starts from the premise that a single operational plan

~~TOP SECRET~~

STRATEGIC AIR PLANNING

Question #1. I understand the strategic attack plan now contains 16 "options." I gather the impression, however, that each option merely indicates an increase in the size force that is launched. Is it possible to get some alternatives into the plan soon, such as having alternative options for use in different situations? For example, the present plan is based on the "optimum mix" concept. Is it now possible to exclude urban areas or governmental controls, or both, from attack? If not, how soon could you develop a plan which contains such options? Can whole areas, such as China, or the European satellites be eliminated from attack? If so, at what risk?

Question #2. Berlin developments may confront us with a situation where we may desire to take the initiative in the escalation of conflict from the local to the general war level.

a. Could we achieve surprise (i.e., 15 minutes or less warning) under such conditions by executing our present plan?

b. How would you plan an attack that would use a minimum-sized force against Soviet long-range striking power only, and would attempt to achieve tactical surprise? How long would it take to develop such a plan?

c. Would it be possible to achieve surprise with such a plan during a period of high readiness?

d. Would not an alternate first strike plan, even if only partially successful when implemented, leave us in a better position than we would be if we had to respond to an enemy first strike?

e. What second strike capability would probably be left to the Soviets after such an attack, assuming full, and partial, success?

f. Is this idea of a first strike against the Soviets long-range striking power a feasible one?

Question #3. A surprise attack aimed at destroying the long-range striking power of the USSR would leave a sizeable number of NKMs facing Europe.

g. Would the inclusion of these NKMs in the initial attack so enlarge the target list as to preclude tactical surprise?

~~TOP SECRET~~

941157-

~~TOP SECRET~~

2. If so, is it possible to plan an immediate follow-on attack which would strike these targets before the first attack was completed? In particular, would our European land and sea-based air forces be suitable for this task?

Question #4. I am concerned over my ability to control our military effort once a war begins. I assume I can stop the strategic attack at any time, should I receive word the enemy has capitulated. Is this correct?

Question #5. Although one nuclear weapon will achieve the desired results, I understand that, to be assured of success, more than one weapon is programmed for each target. If the first weapon succeeds, can you prevent additional weapons from inflicting redundant destruction? If not, how long would it take to modify your plan to cover this possibility?

Question #6. What happens to the planned execution of our strategic attack if the Alert Force is launched and several hours later it is discovered that it has been launched on a false alarm? How vulnerable would we be, and how soon would the U.S. be in a position to attack the USSR?

Question #7. After the Alert Force has been launched, how do I know that our remaining forces are being used to best advantage. Are these follow-on forces automatically committed to predetermined targets, or do we have means of getting damage assessments to direct their attacks?

Question #8. Given the European situation, some of SACUR's tactical fighters now scheduled for atomic attacks may be employed for conventional support of ground forces instead. Can other forces take over the responsibility of hitting SACUR's atomic targets without jeopardizing the success of the plan materially?

~~TOP SECRET~~

1111

941157-

WS RELEASE
ASE NOTE DATE



833
DEPARTMENT OF DEFENSE
OFFICE OF PUBLIC AFFAIRS
Washington 25, D C

HOLD FOR RELEASE
UNTIL 6:30 P.M. (EDT)
SATURDAY, OCTOBER 21, 1961

NO 1173-61

Oxford 53201-53176

ADDRESS BY

ROSWELL L. GILPATRIC, DEPUTY SECRETARY OF DEFENSE
BEFORE THE BUSINESS COUNCIL
AT THE HOMESTEAD, HOT SPRINGS, VIRGINIA

SATURDAY, OCTOBER 21, 1961 - 9:00 P.M. (EST) - 10:00 P.M. (EDT)

As we meet together this evening, I can think of no group of people who share more common interests in the governing of the United States than do those of us here. Most of the businesses you represent do work for the government. Many of you like myself have at times taken leave from your private concerns to serve the public welfare. Without your support the defense of the United States could not be maintained. There will always be many matters at issue between us and many problems of government - business relations to be resolved. But I doubt that there will ever be major insoluble differences between us when the security of our country is at stake. And veritably it is today.

It seemed to me, therefore, that rather than dwell on our problems -- and we have them to deal with -- I should try to develop further for you the thinking behind our present defense policies and programs. It has been my observation that the only way to keep the Government's defense policy clear in the minds of those not in Government is by constant reiteration. Inevitably, in the course of public discussion, misinterpretations and misunderstandings of defense policy develop. It may be because we in Government fail to make ourselves clear in the first place. Perhaps we take it too much for granted that having once stated a policy we have fulfilled our task of achieving public understanding. Or perhaps the subject is so complex that it requires a continuing dialogue between the Government and the people. Whatever the reason, I am convinced that we have not yet succeeded in getting across to the public at large a full understanding of the defense policies we are now pursuing. Even for such well informed individuals as yourselves, it could be worthwhile for

to restate our defense objectives and what we are doing to achieve them:

Twice in this century we have gone unprepared into global conflicts and then waited until the war potential of our economy could be called upon to see us through. Today, now that quick nuclear destruction has become possible, we can no longer place such reliance on long-range potential and second chances. We therefore plan to obligate, in this

MORE

current fiscal year, about \$50 billion for military readiness and civil defense, the largest security expenditure for any peacetime year in our history. This figure is an increase of \$6 billion above a year ago, and \$9 billion higher than the year before that. Actual expenditures, which will rise to about \$47 billion this year, can be expected to climb still higher in subsequent years unless we achieve significant reductions in the world's international tensions.

How do we go about the conversion of these vast sums into defense programs to support our national policies?

First of all, in January of this year, the President set in motion a major review of our defense posture and policies which has already brought some significant changes, including the budget increase I have just mentioned; and further changes are still being considered. One of the President's conclusions was that our arms must be adequate to protect our commitments and ensure our security without being bound by arbitrary budget ceilings. At the same time he envisaged that military economies would result from management improvements in government and industry, and ultimately perhaps from agreements for the control and limitation of arms. The President was determined that our strategic power must be sufficient to deter any deliberate nuclear attack on this country or its allies by being able to survive a first strike by the enemy with sufficient arms to penetrate his defenses and inflict unacceptable losses upon him.

President Kennedy also called for greatly increasing our ability to handle lower levels of conflicts, including local wars and those sub-limited, guerrilla-type struggles which have constituted the most familiar threats to the free world since 1945. He has also determined to improve the flexibility of our defenses, by improving our ability to make swift, selective responses to enemy attacks on the free world regardless of time, place or choice of weapons. At the same time the new Administration embarked upon a political action program designed to reduce the danger

of general thermonuclear war due to error or enemy miscalculation or the runaway spread of a smaller conflict. Thus, while we are making all honorable efforts for a diplomatic solution to the problems of Berlin and Germany, we are intensively studying the organizational and technical aspects of our "command and control" systems to assure a controlled response to any form of aggression.

Berlin is the emergency of the moment, because the Soviets have chosen to make it so. We have responded immediately, with our western allies, by reinforcing our garrisons in that beleaguered city. We have called up some 150,000 reservists, increased our draft calls and extended the time in service of many who are already in uniform. These are the so-called quick-fix measures which we have invoked to improve the western tactical position in Berlin and remind the Soviets that the city is not an open invitation to that variety of aggression which has been described as the salami, or one slice at a time, method.

But our real strength in Berlin -- and at any other point in the perimeter of the free world's defenses that might tempt the Communist probes -- is much more broadly based.

Our confidence in our ability to deter Communist action is based

Our confidence in our ability to resist Communist blackmail, is based upon a sober appreciation of the relative military power of the two sides. We doubt that the Soviet leadership has

in fact any less realistic views, although this may not be always apparent from their extravagant claims. While the Soviets use rigid security as a military weapon, their Iron Curtain is not so impenetrable as to force us to accept at face value the Kremlin's boasts.

The fact is that this nation has a nuclear retaliatory force of such lethal power that an enemy move which brought it into play would be an act of self-destruction on his part. The U. S. has today hundreds of manned intercontinental bombers capable of reaching the Soviet Union, including 600 heavy bombers and many more medium bombers equally capable of intercontinental operations because of our highly developed in-flight refueling techniques and world-wide base structure. The U. S. also has 6 POLARIS submarines at sea carrying a total of 96 missiles, and dozens of intercontinental ballistic missiles. Our carrier strike forces and land-based theater forces could deliver additional hundreds of megatons. The total number of our nuclear delivery vehicles, tactical as well as strategic, is in the tens of thousands; and of course, we have more than one warhead for each vehicle.

Our forces are so deployed and protected that a sneak attack could not effectively disarm us. The destructive power which the United States could bring to bear even after a Soviet surprise attack upon our forces would be as great as -- perhaps greater than -- the total undamaged force which the enemy can threaten to launch against the United States in a first strike. In short, we have a second strike capability which is at least as extensive as what the Soviets can deliver by striking first. Therefore, we are confident that the Soviets will not provoke a major nuclear conflict.

It might be appropriate at this point to say a few words about the Soviet's announced intention to explode a 50 megaton thermonuclear device at the end of October. Our own scientists and military leaders examined the utility of weapons of this and even larger yields several years ago and concluded that the military value was so questionable that it was not worth developing such weapons even though we had the know-how and capacity to do so. While there might be some military advantages from extremely large yields, there are also operational disadvantages. It is therefore quite clear that the Russian's primary purpose is terror. With the customary Soviet heavy-handedness, the timing has been chosen with one eye on Berlin and the other on the 22nd Party Congress. Perhaps this is also the Soviet Union's answer to the discordant voice from its populous neighbor to the south.

As to the test itself, explosions of this size are not necessary for development purposes. As pointed out in a recent White House statement, "we believe the peoples of the world will join us in asking the Soviet Union not to proceed with a test which can serve no legitimate purpose and which adds a mass of additional radioactive fallout." If the Soviets proceed with such an unnecessary and possibly risky test, despite urgings to the contrary, we trust that this latest outrage will remove the doubts of even their most indulgent apologists among the non-aligned nations who failed

to protest the Soviet resumption of testing during the Belgrade Conference.

Notwithstanding what the White House called the "unconfessed political purpose" behind this particular test, we must and we do take seriously the Soviet Union's military technology and the likelihood of future improvements in its nuclear strike posture. We are therefore increasing the survivability of our retaliatory force by programs of hardening, concealment and mobility.

220

We have accelerated deliveries of POLARIS submarines and hastened the development schedule for a greatly improved version of the missiles they carry. We have expanded the development of the MINUTEMAN, our solid-fuel, land-launched missile and enlarged its production capacity. We are proceeding simultaneously with the development of advanced air-to-ground missiles, such as the SKYBOLT, in order to extend the useful life of the manned bomber further into the missile age.

To protect the deterrent effect of our existing bomber forces, we have upped the number of planes on ground alert, and we are working to increase the dependability of our warnings against surprise attack by installing bomb alarm detectors and signals at SAC bases and other key points. Our planners are working on many other important research programs such as missile defense and penetration aids, satellite based communication systems and possible military uses of space.

In the interest of protecting our civilian population from radioactive fallout, we have made a fresh start on a national shelter program under the aegis of the Department of Defense to which have been transferred important new responsibilities in the civilian defense field.

The weapons that form the backbone of our deterrent strength are formidable, and we intend to keep them so. But if we had no effective weapons but the big ones, a small scale communist aggression could confront us with a choice between the risk of general war and a political retreat. Hence we are looking to the condition of our conventional forces, so that a potential enemy may not be tempted to steal from under our noses, gambling that we would not call out the weapons of massive nuclear destruction in response to ambiguous aggression or deliberate probing by the enemy. Let me make clear that we are seeking to acquire flexibility rather than rigidity in the options open to us. This requires a strengthening of conventional, non-nuclear arms; it does not rule out the use of tactical nuclear weapons in a limited war if our interests should so require.

We are placing a new emphasis on our ability to meet limited and guerrilla warfare by expanding research on conventional weapons, improving air and sealift capacities for moving large numbers of troops to crisis areas on short notice, and increasing the procurement of the weapons for limited war. The substantial additional purchases of conventional weapons and equipment include tactical aircraft, tanks, rifles, personnel carriers, artillery and stocks of ammunition.

I might note here that our Military Assistance Program is designed to deal with aggression in its incipient phases, by helping friendly nations to improve their internal security and making local wars and forays against them unprofitable. Our assistance to our NATO allies should also help to deter general war.



As the pressures have mounted on Berlin, we have retained in service or reactivated ships and planes with tactical, troop-carrying or anti-submarine capabilities. We have at the same time started to draw on available manpower pools for substantial increases in the armed services totalling to date about 325,000 men, by extending active duty tours, stepping up the draft, and by recalling reservists to active duty.

These immediate measures are concerned chiefly with Berlin. No one can say how long that crisis will be with us, or where the next Soviet experiment in international anxiety may be scheduled. Probably we are in for a period of protracted tension and we are making our plans accordingly. Southeast Asia is currently under severe pressure, and other areas are not immune.

Obviously, it would be to the advantage of an adversary if we let him rush us into a succession of mobilizations and demobilizations according to his dictates. Instead, it is to our advantage to maintain a ready force of well-equipped regulars which can be augmented in a relatively short time by trained reserve forces. Accordingly, the Army's current goal is to ready a number of priority Reserve or National Guard divisions for call-up on not more than eight weeks' notice. This Army plan will, of course, require corresponding stocks of modern weapons and ammunition to be on hand, and the complementary air and naval units must be brought to active duty status with comparable speed.

This program of accelerated reserve training and modern weapons improvement is intentionally short of full national mobilization, but nevertheless gives us a very real addition to our forces in Europe. First, we and the other Western powers have agreed to bring up to full strength our present units in the Central European Theatre. At home, meanwhile, we are converting to combat readiness the three of our Army's 14 divisions previously engaged in training missions. Later this year, therefore, this country will have ready for immediate deployment six Army divisions and two divisions of Marines, plus the two National Guard divisions already recalled and any other reserves that may hereafter be ordered to duty. Thus, if the clouds over Berlin should darken further between now and winter, the Defense establishment could move to Europe on short notice six or more divisions, more than doubling, if need be, the potent American fighting forces currently assigned to NATO. Meanwhile, large amounts of military equipment and supplies are being prepositioned overseas.

Concurrently with the Army build-up, a number of Air National Guard fighter units have been recalled to provide the necessary air cover and support overseas, and the Air Force has also augmented its airlift capacity by canceling the deactivation of certain transport squadrons and calling up others.

For its part, the Navy is improving its amphibious transport, taking action to permit the assignment of a third carrier to the 6th Fleet in the Mediterranean, and extending antisubmarine patrols on the North Atlantic sealanes. The result will be a general strengthening of

283

naval readiness around the world, thereby bolstering our national deterrent strength and contributing importantly to U. S. resources for limited war. The Navy is constantly improving its vessels through modernization and the procurement of more advanced weapons systems. Nuclear submarines are entering the fleets in increasing numbers; guided missiles are replacing guns on destroyers, frigates and cruisers, and Mach 2 speed aircraft are operating from attack carriers.

Our present plan, as I have indicated, is to count on a ready reserve as a means of quick force augmentation in emergencies. The alternative, which has its advocates, would be substantial increase in our permanent force levels. Let us take a look at the choice we face.

For every fighting man added to our active military forces, the cost is at least \$5,000 a year just for pay and allowances, subsistence, clothing and transportation, without counting the modern combat equipment he needs, ranging from infantry rifles to the latest in nuclear submarines. A larger standing Army would also mean greater overhead costs, in terms of more military installations and added administrative and support facilities. In the long run, as individual duty tours and enlistments are completed; training costs for replacements would also go up.

The Ready Reserve is much less costly to maintain. Members of reserve units are paid only for their weekly and annual training periods. The major items of equipment they require, such as air and sea transport, heavy artillery and tactical aircraft, need not be constantly exercised and can be provided by Air Force and Naval Reserve units when Army reservists are called to active duty.

In reviewing our current preparedness programs, which have already been brought up to record levels for non-wartime, we have asked ourselves whether we could buy enough extra protection by further enlarging our permanent forces to offset the added costs and disadvantages I have mentioned. The answer appears to be no. We must ever be mindful, however, of the fact that the Moscow-Peiping axis is capable of generating simultaneous crises in widely separated parts of the globe. The free world could conceivably be faced with critical situations at the same time in more than one area of the world. Should it prove necessary to deploy U. S. forces in support of two or more threatened areas, additional Reserve and National Guard divisions could be activated in order to provide impressive increments to our strength.

We recognize, of course, that divisions yet to be mobilized represent potential power rather than power in being. Were it to become apparent that to deal with multiple trouble situations a further increase in our permanent forces is needed, then the Congress will be

asked to make the required resources available, and all of us will be called upon for new sacrifices of money, time and energy. Until that contingency occurs, our reserve program should give us strength and flexibility in the most economical manner.

As we hasten the build-up of our conventional forces, we might remind ourselves that, after all, the nations of the NATO alliance have more people, greater economic resources and further advanced technologies than all of the Warsaw Pact countries combined. Moreover, the Soviets may well have reason to doubt the military dependability of their European satellites in a showdown.

Let me sum up, then, where our defenses stand today. First, we continue to rely on our strategic nuclear weapons to convince a would-be aggressor that he could not emerge standing from a general war of his own instigation and we are keeping those weapons up to date. Secondly, we are rapidly strengthening our conventional weapons and increasing our ready reserve of trained manpower, to give us an improved, third choice between all-out nuclear retaliation and retreat. Thirdly, we are endeavoring to strengthen and improve the military defenses of our friends in the world in accordance with their needs, with special attention to preventing or confining limited wars, subversion and guerrilla-type insurgency.

We are determined to have flexibility in our choice and mobility of weapons, and in our capacity to respond to repeated crises in the long run without the dislocation of our entire economy.

The Soviet's bluster and threats of rocket attacks against the free world -- aimed particularly at the European members of the NATO alliance -- must be evaluated against the hard facts of United States nuclear superiority which I discussed earlier. Although we are confident that we would ultimately prevail in a test of strength no matter at what level conflict might be initiated by the Soviet Union, this does not alter our determination to seek a peaceful solution to the world's problems.

But those who would impose a totalitarian world order and deny men and nations the right to pursue their own destinies should understand one point very clearly. The United States does not seek to resolve disputes by violence. But if forceful interference with our rights and obligations should lead to violent conflict -- as it well might -- the United States does not intend to be defeated. As the President reminded the world at the UN last month, our country has both the will and the weapons to join free men in standing up to their responsibilities. We in the Defense Department believe that the proper exercise of our will and the development and management of our weapons will eventually force the Soviet Union to participate with us in a step-by-step program to guarantee the peace which so many nations earnestly desire.

END

-7-

suffices for the atomic strike forces regardless of the circumstances in which a general war might be initiated. The target list is constant and the only question at issue is how much of the list can be destroyed with what degree of assurance. Consequently, the list is broken into

~~TOP SECRET~~

~~RESTRICTED DATA~~

~~Atomic Energy act 1954~~

~~TOP SECRET~~

two parts: a minimum NSTL containing 2220 primary objective targets, together with 835 active defense installations which must be hit in order to reach the primary objectives; and the full NSTL, which contains 3729 targets. Since many of these targets are co-located, and can be destroyed by a single weapon of sufficiently high yield, the actual number of Desired Ground Zeros (DGZ's) in SIOP-62 adds up to 1077.

The target list is assigned a total value of approximately 5,000,000 points; each target is allocated a certain number of points according to its importance; DGZ's are then "optimized" to destroy the maximum number of targets within a given complex; and finally, the most important DGZ's are assigned to those forces which have the highest probability of surviving and destroying the targets.

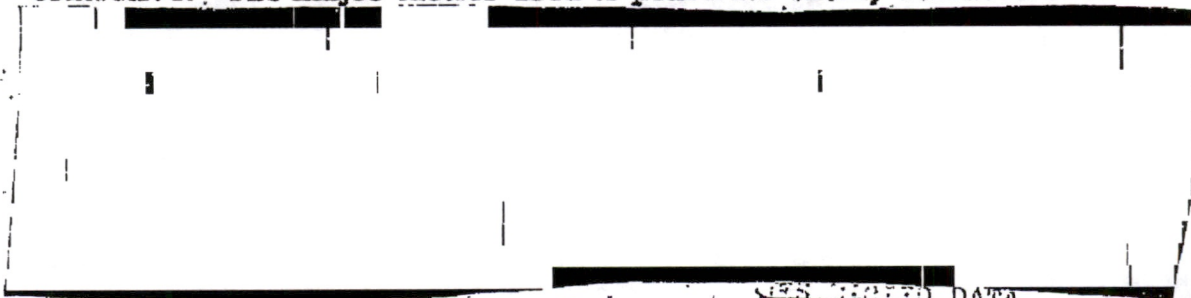
In other words, the "optimum mix" determines what targets should be attacked and when they should be attacked.

Table 1 illustrates in a rough way the targets that are attacked and the relative importance that is attached to them. The Alert Force is assigned 480 DGZ's; the Full Force, as noted, would cover 1077 DGZ's. All countries in the Sino-Soviet Bloc are represented on the target list, but the Soviet Union contains the bulk of the targets. As one example, General Power points out (in JCSM-406-61, Appendix A) that "four SAC alert sorties (11 weapons) are targeted in

However, he goes on to say that they "may be withheld at any time prior to launch of the SAC alert force on a calculated risk basis."

The requirement set by President Eisenhower, based on NESC Study #2009, was that the atomic strike forces have a capability to achieve a 75% assurance of inflicting severe damage to enemy nuclear delivery capabilities and military and government controls. Similarly, there was to be a 75% assurance of inflicting severe damage to the industrial floor space of the Soviet Union and China. A variety of techniques are used to achieve this amount of destruction with the requisite level of confidence. The maximum number of vehicles is launched consistent with the amount of warning received and the readiness of the force. Routes

of all vehicles are coordinated, and time over target (TOT) is carefully controlled. The major tactics used to penetrate enemy defenses are:



~~TOP SECRET~~

Table 1

Targets and their Assignment*

<u>Type of Target</u>	<u>Total Targets</u>	<u>Alert Force Targets</u>
I. <u>Nuclear Threat to the U.S.</u>		
Airfields with nuclear storage and primary staging bases	76	76
Nuclear storage sites	68	68
Missile sites and storage, ICBM**	4	4
[REDACTED]	218	166
Missile sites, MRBM**	6	6
Missile storage, MRBM	1	1
Naval Bases	29	26
[REDACTED]	88	56
[REDACTED]	5	5
[REDACTED]	369	217
Naval Base, Surface	11	11
[REDACTED]	80	72
[REDACTED]	29	26
V. <u>Urban-Industrial Complexes at Risk</u>		
USSR	295	199
China	78	49
VI. <u>Government Control Centers</u>		

USSR and China

126

118

* Although this table is based on a JCS document, it does not represent the full target list. For example, 835 active defense installations are omitted.

** These numbers undoubtedly will change or already have changed.

- 3 -

TOP SECRET

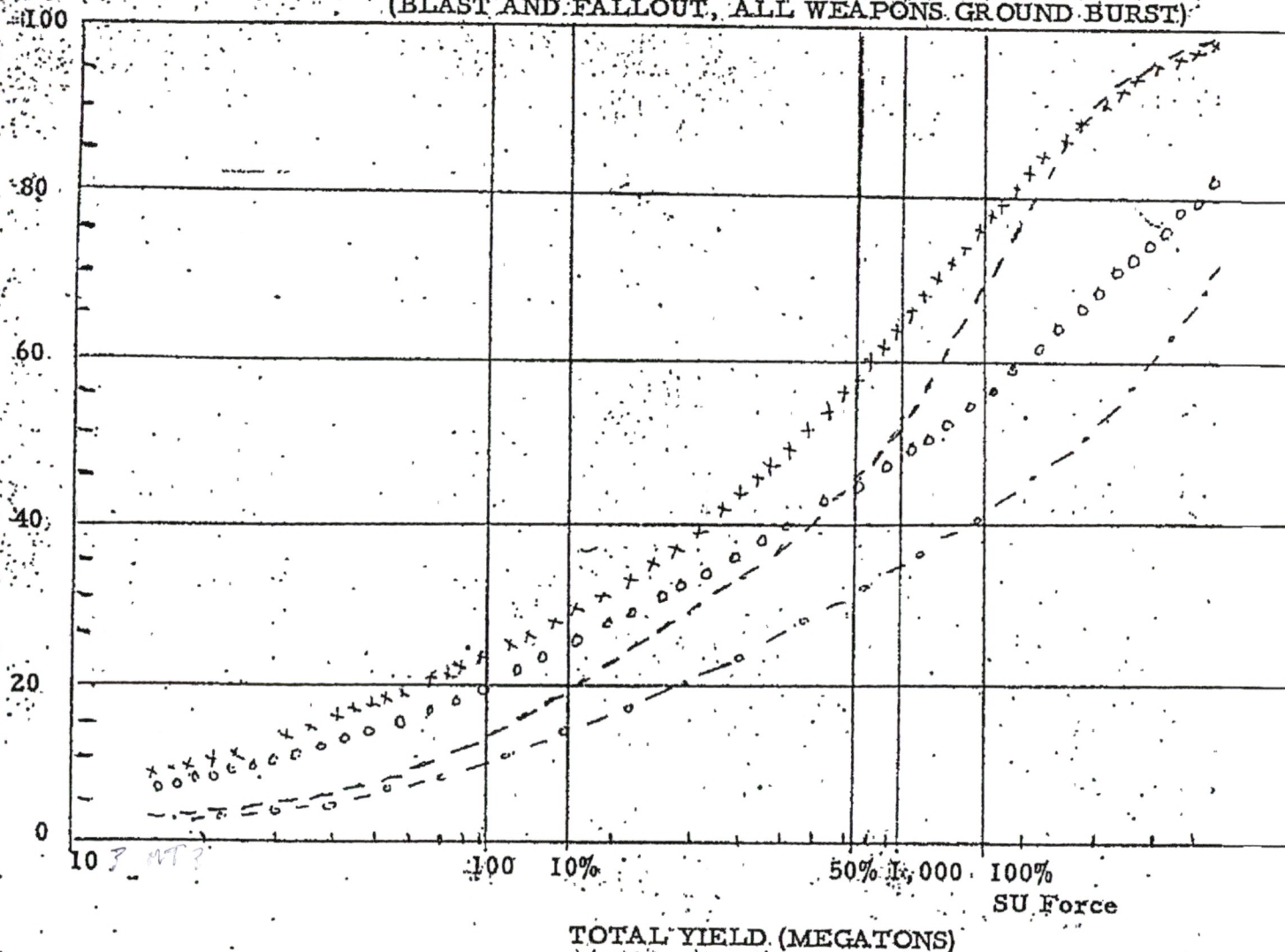
~~TOP SECRET~~
~~Atomic Energy Act 1954~~

DEATHS FROM ALTERNATIVE ATTACKS ON U. S. CITIES

(BLAST AND FALLOUT, ALL WEAPONS, GROUND BURST)

PERCENTAGE OF U. S. POPULATION KILLED

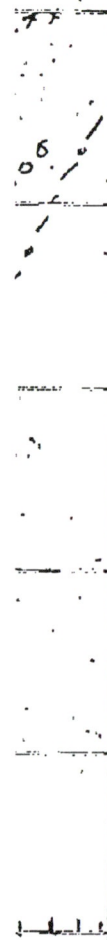
CHART II



- - - - (10 MT Weapons, Incidental Shelter)
- o-o-o- (10 MT Weapons, Basement Shelters)
- x x x x (1 MT Weapons, Incidental Shelter)
- o o o o o (1 MT Weapons, basement shelters)

DOE

Fallout at H +
U S Populati



10,000

-I - 2400 T
on - 180,000,000

TOP SECRET

In order to deliver the requisite damage to target with the desired assurance, a system of cross-targeting is employed. Different types of vehicles, launched from a variety of bases, are scheduled against a particular target. Thus, a Jupiter, an Atlas, a Titan, and 3 B-52's are programmed against [REDACTED] ✓

OSD
b1
A number of degradation factors are used in order to determine the probability that a weapon will reach a given bomb release line (BRL) and detonate on target. [REDACTED]

[REDACTED] Table II indicates some of the probabilities that have been obtained with respect to SIOP-62.

DOE
The delivery systems integrated into SIOP-62 total 2258 vehicles. They carry 3423 weapons with yields ranging from [REDACTED] megatons. The Alert Force is programmed to deliver 1447 weapons with a total yield of [REDACTED]. The Full Force, with 3423 weapons, would deliver [REDACTED] - assuming that the entire force got through to target. Tables III and IV show numbers and types of delivery vehicles, numbers and locations of bases from which they would be launched, and types of weapons to be employed.

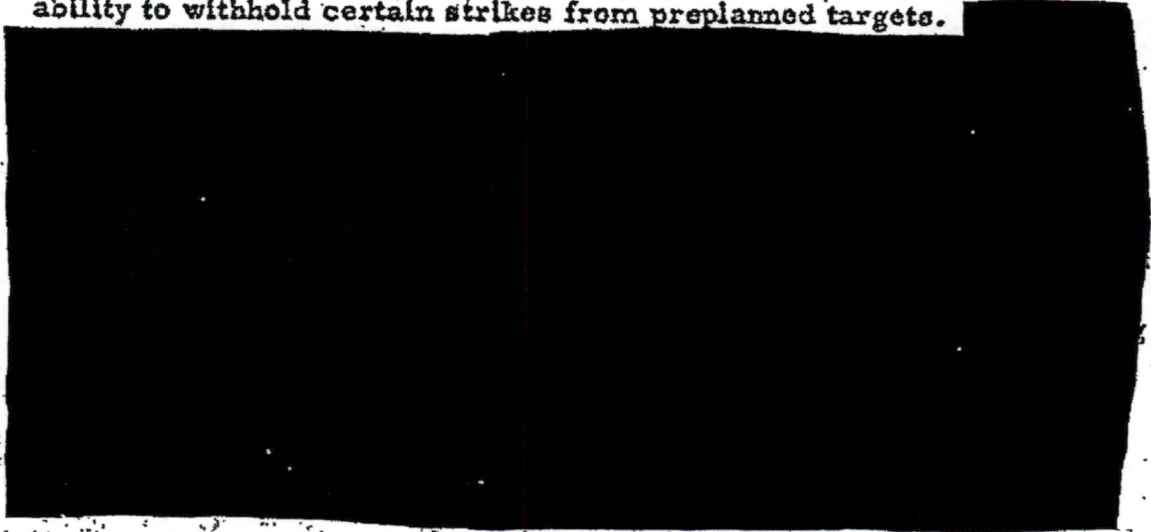
SIOP-62 contains 16 options. However, these options do not refer to alternative strategies but to the number of delivery vehicles that can be generated for launch at specified times after A-Hour (time to begin

force preparation). Thus, the alert force has zero generation time and represents Option 1. The full force can be generated with strategic warning of something over 28 hours. This represents Option 16. The alert force would be launched at an "optimum mix" of military and urban-industrial targets. Follow-on forces would attack additional targets together with the same targets scheduled for the alert force (in order to increase assurance of success). Table V shows the schedule of force generation.

~~RESTRICTED DATA~~
~~Atomic Energy act 1954~~

~~TOP SECRET~~

The actual flexibility in SIOP-62 consists essentially of the ability to withhold certain strikes from preplanned targets.



050
b1

The outcome to be expected from implementation of SIOP-62 has been calculated to a certain degree for two cases: where the alert force gets off, and where the full force gets off. It should be noted that casualties and damage to the United States and its Allies customarily are not presented, although casualties in the United States alone (resulting from Soviet attacks) are expected to be 16,000,000 at a minimum. Tables VI, VII, VIII, IX, and X show what might happen to the Sino-Soviet Bloc in the two cases mentioned above. Presumably the SIOP planning factors which provided the averages shown in Table II were used to obtain these results.

- 5 -

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~Atomic Energy act 1954~~

~~RESTRICTED DATA~~
~~Atomic Energy act 1954~~

~~TOP SECRET~~

Table II

Some SIOP-62 Probabilities

Average Delivery Assurance

52.3%

63.1%

35.5%

56.8%

Vehicles

SIOP missiles (including cruise
missiles)

All-weather aircraft

Non-all-weather aircraft

All SIOP weapons

Average DGZ Assurance (that one weapon will detonate on target)

87%

- 6 -

~~TOP SECRET~~

~~TOP SECRET~~
~~Atomic Energy Act 1954~~

~~RESTRICTED DATA~~
~~Atomic Energy act 1954~~

TOP SECRET

Table III

SIOP Delivery Systems and Their Deployment

<u>Type of Vehicle</u>	<u>Number</u>	<u>Location of Bases</u>	<u>Number</u>
B-47	760	United States	
B-52	447		
B-58	32		
B-57	38		
B-66	17		
F-84-F	18		
F-100	221		
F-101	28		
Vallant	8		
Canberra	41		
AD	69	United Kingdom	
A3D	58		
A4D	168		
Polaris	80		
Atlas	58		
Titan	21	Germany	
Jupiter	30		
Snark	30		
Regulus	4		
Mace	54		
Matador	76		
	2258		

DOE

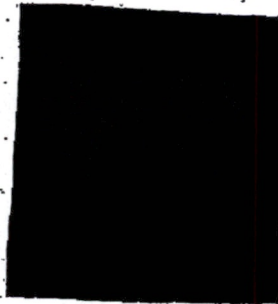
TOP SECRET

Table IV

Weapon Variety in SIOP-62

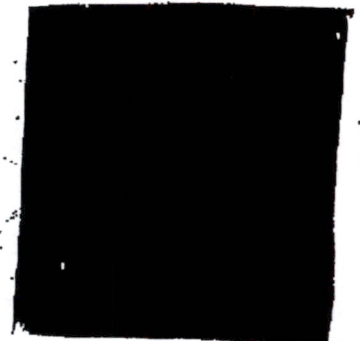
Aircraft Delivery
Type Yield

Mark 41
Mark 39
Mark 43
Mark 28
Mark 5
Mark 7
Boar
Mark 105



Missile Delivery
Type Yield

Titan
Snark
Atlas
Jupiter
Regulus
Hound Dog
Polaris
Mace
Matador



DOE


- 8 -

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~Atomic Energy act 1954~~

~~TOP SECRET~~

Table V
Force Generation

<u>Option</u>	<u>Time</u>	<u>Weapons</u>	<u>Delivery Systems</u>	<u>Total</u>
1	0000	 DOE	874	874
2	0100		70	
3	0200		57	
4	0300		232	
5	0400		46	
6	0500		50	
7	0600		65	1394
8	0700		54	
9	0800		91	
10	0900		51	
11	1000		80	
12	1200		97	
13	1400		75	1842
14	2000		193	
15	2800		209	
16	Strategic Warning		94	2338*

* This number is higher than the total shown in Table III. Although both numbers appear in the same paper, there is no explanation for the discrepancy.

~~TOP SECRET~~

~~TOP SECRET~~

Table VI

Targets and their Destruction

<u>Type of Target</u>	<u>Total Targets</u>	<u>Destroyed by</u>	
		<u>Alert Force</u>	<u>Full Force</u>
I. <u>Nuclear Threat to the U.S.</u>			
Airfields with nuclear storage and primary staging bases	76	76	76
Nuclear storage sites	68	56	68
Missile sites and storage, ICBM	4	4	4
[REDACTED]	218	99	212
Missile sites, MRBM	6	1	6
Missile storage, MRBM	1	1	1
Naval Bases	29	20	28
[REDACTED]	88	24	83
[REDACTED]	5	5	5
[REDACTED]	369	91	276
Naval Base, Surface	11	8	10
[REDACTED]	80	15	56
[REDACTED]	29	15	26
V. <u>Urban-Industrial Complexes at Risk</u>			
USSR	295	199	295
China	78	49	78
VI. <u>Government-Control Centers</u>			
USSR and China	126	85	121

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~Atomic Energy Act 1954~~

~~TOP SECRET~~

Table VIII

SIOP Casualties

[REDACTED]

OSD
b1
[REDACTED]

	Caused by	
	Alert Force	Full Force
	421,000	496,000
	258,000	308,000
	197,000	292,000
	4,200	214,000
	497,000	2,636,000
	<u>1,300</u>	<u>58,000</u>
	1,378,500**	4,004,000***

* These casualties result from strikes by SIOP-committed forces only.

** One percent of the [REDACTED] population.

*** Four percent of the [REDACTED] population.

~~TOP SECRET~~

~~RESTRICTED DATA~~
~~Atomic Energy Act 1954~~

~~TOP SECRET~~

Table IX

Damage to Sino-Soviet Bloc Civil Societies*

	<u>Destroyed** by</u>	
	<u>Alert Force</u>	<u>Full Force</u>
% Industrial floor space USSR	65	74
% Total floor space USSR	75	82
% Urban casualties*** USSR	55	71
% Rural casualties USSR	21	39
% Total casualties USSR	37	54
% Industrial floor space China	53	59
% Total floor space China	61	62
% Urban casualties China	41	53
% Rural casualties China	4	9
% Total casualties China	10	16

* Estimates based on the arrival of at least one weapon at each DGZ.

** Destroyed means damage to building or facilities which precludes production without essentially complete reconstruction of the installation. It connotes collapse or severe damage to all principal structures. A greater number of installations will receive lesser but significant damage which would require materials and effort before production could be resumed.

*** Casualties include fallout effects during the first 72 hours, with a 60% shielding factor.

~~TOP SECRET~~

~~SECRET~~
~~Atomic Energy act 1954~~

~~TOP SECRET~~

~~SECRET~~ DATA
~~Atomic Energy Act~~

The effort thus far has been to describe SIOP-62 and present official evaluations of the outcome of a general war should the SIOP be implemented. It may now be appropriate to underline several characteristics of the plan and briefly discuss the evaluations.

Although SIOP-62 possesses the potential of a limited amount of flexibility, it is actually an all-purpose plan designed for execution in its existing form regardless of the contingency that may arise. The rigidity of the plan, especially in respect of targeting, has a number of causes. Several of them are worth enumerating.

1. There is a widespread expectation among military planners that the Soviets, whether they strike first or second, will attack urban targets or some urban-military combination comparable to the "optimum mix" upon which SIOP-62 is postulated. Consequently there is no need to be especially selective about targets or discriminating in the U. S. attack.
2. There is an equally widespread expectation that, regardless of the circumstances, the Soviets will manage to launch a number of weapons against the U. S. In other words, the U. S. will never be able to achieve the combination of surprise and complete destruction of the Soviet long-range nuclear capability; the Soviets will always execute either urban or optimum mix attacks; therefore the U. S. must always attack a composite target system as exemplified by SIOP-62. Nowhere is any real consideration given to the possibility that there may be an interaction between our targeting philosophy and that of the Soviet Union.
3. Accompanying these assumptions is the notion that prevailing in a general war means coming out relatively ahead of the enemy. As an example, if the U. S. has lost 20% of its industrial capacity and 30% of its people, but the Sino-Soviet Bloc has lost 40% of its industrial capacity and 60% of its people, then the U. S., somehow or other, has won the war. In somewhat oblique fashion, the JCS express this philosophy in JCSM-430-61. As they put it: Diversion of U. S. forces from other targets to military targets would reduce by relatively small percentage the effect on the Soviet civil society. If the diversion were highly pronounced, it could result in failure to damage the war-supporting economies of the USSR and China to the extent necessary to render them incapable of further support of the war effort. This latter condition was found by Study No. 2009 to be a shortcoming of attacking only military targets.

TOP SECRET

SECRET DATA

7 Oct 1955

4. Finally, although this concern is rarely expressed, there is a growing fear that - owing to the vulnerability of U.S. strategic forces and our command-control - three consequences might flow from introducing any real flexibility into the SIOP. The first is that our offensive forces might be cut down to a very small fraction of their prewar size by a well-executed surprise attack; hence our retaliation would hurt the Soviets only if directed against an urban or composite target system. The second is that a surprise attack might knock out the U.S. command-control and leave our residual forces uncertain as to the plan they should execute. Existence of only one plan - SIOP-62 - together with the elaborate system of cross-targeting hopefully reduces the probability that the Soviets will escape unscathed from such an attack. A third consequence of great concern is that greater flexibility, introduced under these circumstances, will become widely known, will tempt the Soviets to attack, and thereby will weaken deterrence.

In addition to the rigidity inherent in SIOP-62, the plan depends very heavily for its success upon warning sufficient to launch the alert force. If sufficient warning is not received, it is conceivable that few, if any, U.S. delivery vehicles would get off. Such a contingency is within the bounds of possibility, especially with the growth of the Soviet ICBM force.

Finally, SIOP-62 is, to put it mildly, an extremely blunt instrument. Even in the case of strategic warning, the plan envisages using the force in such a way that the enemy has a high probability of receiving warning that a U.S. attack is on the way. Penetration techniques, as noted, call for mass, countermeasures, and the development of corridors through which subsequent bombers can pass. These are brute force tactics which, in turn, make for almost certain fulfillment of the prophecy that the enemy will be able to launch some of his weapons, regardless of the circumstances.

The evaluation of SIOP-62 contains a number of interesting features. The planning factors used to establish the assurance with which a weapon will reach the BRL are highly uncertain quantities. The averages, under some circumstances, could be much too high; under others, they may be much too low. Nowhere is a factor for base destruction in U.S. included. Consequently, however detailed and refined the calculations about damage to the Sino-Soviet Bloc, no great weight of confidence can be placed in them. Similarly, there must be large uncertainties about the level of damage that the U.S. would suffer. In short, although the outcomes shown for SIOP-62 are of value, they are incomplete - not only because they play down the damage to the U.S., but also because they concentrate on one set of results rather than on a range.

- 14 -

*SIOP is a one plan for all circumstances
is like JCS McN instruction on
one plan (EX) for both Army & Navy*

TOP SECRET

7 Oct 55